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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

Technical Report 32-1581

*A Bibliography of the Theory and Application
of the Phase-Lock Principle*

*William C. Lindsey
University of Southern California*

*Robert C. Tausworthe
Jet Propulsion Laboratory*

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JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA

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Preface

The work described in this report was sponsored by the National Aeronautics and Space Administration, under Contract NAS 7-100, and by the Department of the Navy, Office of Naval Research, under Contract N00014-67-A-0269-0022. The National Aeronautics and Space Administration sponsorship was directed through the Telecommunications Division of the Jet Propulsion Laboratory.

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Abstract

Since much has been recorded on the phase-locked loop, a literature search was conducted in an effort to collect and compile as many references on the subject as possible. Although not all inclusive, this report presents a comprehensive listing of approximately 800 references covering the past two decades of work reported throughout the world. The compilation is given in two parts: first by categories, and then alphabetically by authors.

A Bibliography of the Theory and Application of the Phase-Lock Principle

I. Introduction

As the reader may be made aware by the mere weight of this report, the world has had much to say about the *phase-locked loop* over the past two decades. Several years ago, the authors decided to compile as many references on this subject as possible and list them both categorically and alphabetically into one report. The project sounded easy enough. A computer search of the literature generated a six-inch-thick printout of references that had been keyed to such words as "phase lock," "tracking systems," etc. The task remained, however, to first weed out those which did not appear to be appropriate, and then incorporate those with references which we had accumulated over the years, if not already included in the list.

But the more we stirred around in it, the more we found and the bigger the job got. Some references were missing page numbers, journal references, and were otherwise incomplete; others contained errors in the title, journal reference, date, etc. We have attempted to check as many sources as possible, but we know that we still do not have a complete set of references, that in the ones given here errors yet remain, and that some are still inadequate for the reader to locate the cited work.

Readers who detect omitted references or errors in the ones given or who can supply missing information in these references are requested to contact the authors so that the supplemental information can be incorporated into future updates of this report.

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